

# COMPACT GROUT PLANTS



## INJECTO - COMPACT IC 650/IC 1400

The INJECTO-COMPACT (IC) grout plants consist of an HCM mixer, an HRW agitator and a ZMP grout pump. All components are functionally arranged on a common base with a central lifting point. The use of the INJECTO-COMPACT grout plants considerably reduces the installation time on site and requires a minimum of operating personnel. The components can easily be detached from the main unit for individual use.



INJECTO - COMPACT Model	Max. capacity (W/C ratio = 1) m <sup>3</sup> /h	Max. pressure bar	Motor rating	
			50 Hz kW	60 Hz kW
IC 650/710	5.0	100	11.6	18.5
IC 650/711	5.0	20	10	16.5
IC 650/712	4.8	90	13.5	20.5
IC 650/725	5.0	100	15	23
IC 1400/710	8.0	100	15	18.5
IC 1400/712	4.8	90	17	20.5
IC 1400/725	8.0	100	18.5	22.5
IC 1400/726	8.0	100	39.5	46

# SMALL GROUTING UNITS



## INJECTO - COMPACT IC 310/IC 325

The INJECTO-COMPACT 310/325 units are suitable for the grouting of tie-back anchors, rock bolts, soil nails, tension cables as well as for tube à manchette and rock grouting. In microtunnelling the compact units are used to mix and inject bentonite suspensions.



INJECTO - COMPACT		310	325
Capacity, max. (W/Z ratio = 1)	m <sup>3</sup> /h	1.2	2
Pressure, max.	bar	100	100
Particle size, max.	mm	5	5
Motor rating 50 Hz	kW	7.5	9
Motor rating 60 Hz	kW	9	11



# RECORDING SYSTEMS



## HIR/HFR

The HANY Recording Systems are suitable to measure pressure and flow of various kinds of grout and to carry out permeability tests (Lugeon test). Various models, from the simple disc pressure recorder to the fully electronic unit with data processing capabilities, are available. The HIR is a simple recording system consisting of an electro-magnetic flow meter and a pressure transducer. The pressure transducer can be placed within the measuring unit or at the point of injection. The recording unit contains a chart recorder for pressure and flow rate as well as a totalizer for the accumulated flow.



The HFR is a sophisticated recording system which records the pressure and flow of up to 6 grout lines simultaneously. The recording data are stored on a PCMCIA Memory Card and can be processed on a PC. The program allows print-out of each grouting sequence with the respective curves as well as a summary of all the sequences of a shift/day etc.



The pressure is measured by a pressure transducer at the pump or at the point of injection. The flow can be measured either by an electromagnetic flow meter or can be integrated from the number of strokes of the grout pump. The stroke counting version is not quite as accurate but it is a very economic solution, especially for multiple hole grouting in conjunction with several small grout pumps such as the ZMP 610 or ZMP 625.